

## CLAIMS

What is claimed is:

1    1.    A policy management tool, comprising:  
2                 dynamic network information; and  
3                 a policy manager coupled to the model to manage deployment of at least  
4         one policy to a set of devices in a network based on the dynamic network information.

1    2.    The tool of claim 1 wherein the policy manager comprises a policy to restrict  
2         certain types of traffic at multiple points within the network via a topology-based  
3         analysis of the network.

1    3.    The tool of claim 1 wherein the policy manager comprises a policy to queue,  
2         buffer, or prioritize certain types of traffic at multiple points within the network based  
3         on an analysis of traffic found on various portions of the network.

1    4.    The tool of claim 1 wherein the policy manager comprises a policy to prioritize  
2         traffic, wherein the policy automatically selects the prioritization mechanism based on  
3         the protocol and/or media the traffic traverses.

1    5.    The tool of claim 1 wherein the policy manager comprises a policy to monitor  
2         response time of content transfer between one or more primary servers and a device in  
3         the network and replicate content of the primary servers to at least one other server  
4         when the content response time of a primary server exceeds a predetermined metric.

1       6       The tool of claim 1 wherein the policy manager comprises a policy to monitor  
2       the performance of one or more primary servers and replicate content of the primary  
3       servers to at least one other server when the performance metrics of a primary server  
4       exceed a predetermined value.

1       7.      The tool of claim 1 wherein the policy manager comprises a policy to monitor  
2       the health of one or more primary servers in the network, to replicate content of the  
3       primary servers to at least one other server when a primary server experiences a fault,  
4       and to configure the other server to emulate the primary server.

1       8.      The tool of claim 1 wherein the policy manager creates access control lists to  
2       control traffic through edge devices in the network based on a topology analysis of the  
3       network.

1       9.      The tool of claim 1 wherein the dynamic network information comprises a  
2       network topology, network statistical information, or network traffic information.

1       10.     The tool of claim 1 wherein the policy manager comprises a policy to replicate  
2       content of a first device to a second device when the content response time of the first  
3       device exceeds a predetermined metric.

1       11.     The tool of claim 1 wherein the policy manager comprises a policy to  
2       selectively configure a set of devices based on an analysis of the traffic processed by  
3       the set of devices.

1    12.    The tool of claim 1 wherein the policy manager comprises a policy to replicate  
2    content of a first device to a second device when the first device experiences a fault  
3    and to configure the second device to emulate the first device.

1    13.    A method, comprising:

2                 applying dynamic network information to a policy manager; and  
3                 mapping a policy to a set of devices in the network based on the  
4    dynamic network information.

1    14.    The method of claim 13 wherein the policy manager comprises a policy to  
2    restrict certain types of traffic at multiple points within the network via a topology-  
3    based analysis of the network.

1    15.    The method of claim 13 wherein the policy manager comprises a policy to  
2    queue traffic in devices in the network based on priority.

1    16.    The method of claim 13 wherein the policy manager comprises a policy to  
2    buffer traffic in devices in the network based on priority.

1    17.    The method of claim 13 wherein the policy manager comprises a policy to  
2    prioritize traffic in the network based on type of traffic.

1    18.    The method of claim 13 wherein the policy manager comprises a policy to  
2    monitor response time of content transfer between one or more primary servers and a  
3    device in the network and replicate content of the primary servers to at least one other  
4    server when the content response time of a primary server exceeds a predetermined  
5    metric.

1    19.   The method of claim 13 wherein the policy manager comprises a policy to  
2    monitor the performance of one or more primary servers and replicate content of the  
3    primary servers to at least one other server when the performance metrics of a primary  
4    server exceed a predetermined value or to monitor the performance of one or more  
5    primary servers and replicate content of the primary servers to at least one other server  
6    when the performance metrics of a primary server exceed a predetermined value.

1    20.   The method of claim 13 wherein the policy manager comprises an access  
2    control list to control traffic through edge devices in the network.

1    21.   The method of claim 13 wherein the dynamic network information comprises a  
2    network topology, network statistical information, or network traffic information.

1    22.   The method of claim 13 wherein the policy manager comprises a policy to  
2    replicate content of a first device to a second device when the content response time of  
3    the first device exceeds a predetermined metric.

1    23   The method of claim 13 wherein the policy manager comprises a policy to  
2    selectively configure a set of devices based on traffic types to the set of devices.

1    24.   The method of claim 13 wherein the policy manager comprises a policy to  
2    replicate content of a first device to a second device when the first device experiences  
3    a fault and to configure the second device to emulate the first device.

- 1 25. An apparatus, comprising:
- 2       a machine-readable medium having stored thereon instructions for causing a  
3 processor to:  
4           apply dynamic network information to a policy manager; and  
5           map a policy to a set of devices in the network based on the topology of  
6 the network.
- 1 26. The apparatus of claim 25 wherein the instructions are further to cause the  
2 processor to apply a policy to restrict certain types of traffic at multiple points within  
3 the network via a topology-based analysis of the network.
- 1 27. The apparatus of claim 25 wherein the instructions are further to cause the  
2 processor to apply a policy to queue traffic in devices in the network based on priority.
- 1 28. The apparatus of claim 25 wherein the instructions are further to cause the  
2 processor to apply a policy to tag or prioritize traffic in the network based on type of  
3 traffic.
- 1 29. The apparatus of claim 25 wherein the instructions are further to cause the  
2 processor to apply a policy to response time of content transfer between one or more  
3 primary servers and a device in the network and replicate content of the primary  
4 servers to at least one other server when the content response time of a primary server  
5 exceeds a predetermined metric.

1    30. The apparatus of claim 25 wherein the policy manager further comprises a  
2    policy to monitor the performance of one or more primary servers and replicate  
3    content of the primary servers to at least one other server when the performance  
4    metrics of a primary server exceed a predetermined value or to monitor the  
5    performance of one or more primary servers and replicate content of the primary  
6    servers to at least one other server when the performance metrics of a primary server  
7    exceed a predetermined value.